

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1.-18. (Canceled)

19. (Currently Amended) A semiconductor device including at least a thin film transistor comprising:

a first silicon oxide film over a substrate;

a crystalline semiconductor island ~~on an insulating surface~~ on the first silicon oxide film;

a gate insulating film comprising a second silicon oxide film over the crystalline semiconductor island; and

a conductive film including at least one of aluminum, titanium, and titanium nitride, said conductive film being formed ~~[[on]]~~ over the first silicon oxide film,

wherein the second silicon oxide film includes halogen at a concentration of  $5 \times 10^{20} \text{ cm}^{-3}$  or less and carbon at a concentration of  $5 \times 10^{19} \text{ cm}^{-3}$  or less.

20. (Currently Amended) A semiconductor device according to claim 19, wherein the concentrations of halogen and carbon are detected by secondary ion mass spectroscopy.

21. (Currently Amended) A semiconductor device according to claim 19, wherein the halogen is chlorine.

22. (Currently Amended) A semiconductor device according to claim 19, wherein the halogen is fluorine.

23. (Currently Amended) A semiconductor device according to claim 19, wherein the second silicon oxide film includes carbon at a concentration of  $1 \times 10^{18} \text{ cm}^{-3}$  or less.

24. (Currently Amended) A semiconductor device according to claim 19, wherein the second silicon oxide film includes halogen at a concentration of  $1 \times 10^{17} \text{ cm}^{-3}$  or more.

25. (Currently Amended) A semiconductor device according to claim 19, wherein the second silicon oxide film is formed by plasma chemical vapor deposition using an organic silane.

26. (Currently Amended) A semiconductor device according to claim 25, wherein the organic silane comprises at least a material selected from the group consisting of  $\text{Si}(\text{OC}_2\text{H}_5)_4$ ,  $\text{Si}_2\text{O}(\text{OC}_2\text{H}_5)_6$ ,  $\text{Si}_3\text{O}_2(\text{OC}_2\text{H}_5)_8$ ,  $\text{Si}_4\text{O}_3(\text{OC}_2\text{H}_5)_{10}$ , and  $\text{Si}_5\text{O}_4(\text{OC}_2\text{H}_5)_{12}$ .

27.-34. (Canceled)

35. (New) A semiconductor device comprising:  
a first insulating film comprising silicon oxide formed over a substrate;  
a semiconductor island comprising crystalline silicon formed on the first insulating film;  
a gate insulating film comprising silicon oxide formed on the semiconductor island;  
a gate electrode formed over the semiconductor island with the gate insulating film interposed therebetween;

wherein the gate insulating film includes halogen at a concentration of  $5 \times 10^{20} \text{ cm}^{-3}$  or less and carbon at a concentration of  $5 \times 10^{19} \text{ cm}^{-3}$  or less.

36. (New) A semiconductor device according to claim 35, wherein the concentrations of halogen and carbon are detected by secondary ion mass spectroscopy.

37. (New) A semiconductor device according to claim 35, wherein the halogen is chlorine.

38. (New) A semiconductor device according to claim 35, wherein the halogen is fluorine.

39. (New) A semiconductor device according to claim 35, wherein the concentration of carbon is  $1 \times 10^{18} \text{ cm}^{-3}$  or less.

40. (New) A semiconductor device according to claim 35, wherein the concentration of halogen is  $1 \times 10^{17} \text{ cm}^{-3}$  or more.

41. (New) A semiconductor device according to claim 35, wherein the gate insulating film is formed by plasma chemical vapor deposition using an organic silane.

42. (New) A semiconductor device according to claim 41, wherein the organic silane comprises at least a material selected from the group consisting of  $\text{Si}(\text{OC}_2\text{H}_5)_4$ ,  $\text{Si}_2\text{O}(\text{OC}_2\text{H}_5)_6$ ,  $\text{Si}_3\text{O}_2(\text{OC}_2\text{H}_5)_8$ ,  $\text{Si}_4\text{O}_3(\text{OC}_2\text{H}_5)_{10}$  and  $\text{Si}_5\text{O}_4(\text{OC}_2\text{H}_5)_{12}$ .

43. (New) A semiconductor device comprising:  
a semiconductor island comprising crystalline silicon formed over a substrate;

a gate insulating film comprising silicon oxide formed on the semiconductor island;

a gate electrode formed over the semiconductor island with the gate insulating film interposed therebetween; and

an interlayer insulating film comprising silicon oxide formed over the gate electrode,

wherein the gate insulating film includes halogen at a concentration of  $5 \times 10^{20} \text{ cm}^{-3}$  or less and carbon at a concentration of  $5 \times 10^{19} \text{ cm}^{-3}$  or less.

44. (New) A semiconductor device according to claim 43, wherein the concentrations of halogen and carbon are detected by secondary ion mass spectroscopy.

45. (New) A semiconductor device according to claim 43, wherein the halogen is chlorine.

46. (New) A semiconductor device according to claim 43, wherein the halogen is fluorine.

47. (New) A semiconductor device according to claim 43, wherein the concentration of carbon is  $1 \times 10^{18} \text{ cm}^{-3}$  or less.

48. (New) A semiconductor device according to claim 43, wherein the concentration of halogen is  $1 \times 10^{17} \text{ cm}^{-3}$  or more.

49. (New) A semiconductor device according to claim 43, wherein the gate insulating film is formed by plasma chemical vapor deposition using an organic silane.

50. (New) A semiconductor device according to claim 49, wherein the organic silane comprises at least a material selected from the group consisting of  $\text{Si}(\text{OC}_2\text{H}_5)_4$ ,  $\text{Si}_2\text{O}(\text{OC}_2\text{H}_5)_6$ ,  $\text{Si}_3\text{O}_2(\text{OC}_2\text{H}_5)_8$ ,  $\text{Si}_4\text{O}_3(\text{OC}_2\text{H}_5)_{10}$  and  $\text{Si}_5\text{O}_4(\text{OC}_2\text{H}_5)_{12}$ .

51. (New) A semiconductor device comprising:  
a first insulating film comprising silicon oxide formed over a substrate;  
a semiconductor island comprising crystalline silicon formed on the first insulating film;  
a gate insulating film comprising silicon oxide formed on the semiconductor island;  
a gate electrode formed over the semiconductor island with the gate insulating film interposed therebetween;  
a second insulating film comprising silicon oxide formed over the gate electrode, wherein the gate insulating film includes halogen at a concentration of  $5 \times 10^{20} \text{ cm}^{-3}$  or less and carbon at a concentration of  $5 \times 10^{19} \text{ cm}^{-3}$  or less.

52. (New) A semiconductor device according to claim 51, wherein the concentrations of halogen and carbon are detected by secondary ion mass spectroscopy.

53. (New) A semiconductor device according to claim 51, wherein the halogen is chlorine.

54. (New) A semiconductor device according to claim 51, wherein the halogen is fluorine.

55. (New) A semiconductor device according to claim 51, wherein the concentration of carbon is  $1 \times 10^{18} \text{ cm}^{-3}$  or less.

56. (New) A semiconductor device according to claim 51, wherein the concentration of halogen is  $1 \times 10^{17} \text{ cm}^{-3}$  or more.

57. (New) A semiconductor device according to claim 51, wherein the gate insulating film is formed by plasma chemical vapor deposition using an organic silane.

58. (New) A semiconductor device according to claim 57, wherein the organic silane comprises at least a material selected from the group consisting of  $\text{Si}(\text{OC}_2\text{H}_5)_4$ ,  $\text{Si}_2\text{O}(\text{OC}_2\text{H}_5)_6$ ,  $\text{Si}_3\text{O}_2(\text{OC}_2\text{H}_5)_8$ ,  $\text{Si}_4\text{O}_3(\text{OC}_2\text{H}_5)_{10}$  and  $\text{Si}_5\text{O}_4(\text{OC}_2\text{H}_5)_{12}$ .